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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/696,757 | 10/29/2003 | John A. Sollars JR. | 2056B | 6684 |

7590 07/12/2007
John E. Vick, Jr.
Legal Department, M-495
PO Box 1926
Spartanburg, SC 29304

EXAMINER

CULBRETH, ERIC D

| | |
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| ART UNIT | PAPER NUMBER |
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3616

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| MAIL DATE | DELIVERY MODE |
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07/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/696,757 | | SOLLARS, JOHN A. | |
| | Examiner | | Art Unit | |
| | Eric Culbreth | | 3616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,13-16,18,22,23 and 37-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,13-16,18,22,23 and 37-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>3/12/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 10, 13-16, 18, 22-23 and 37-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 50-145875 (cited by applicant).

Japanese '875 discloses an inflatable airbag cushion made of multiple fabric layers and "closely" spaced interconnected woven in joints that resist gas permeation comprising in Figure 4 first and second woven layers each having yarns running in a warp direction 2 and a weft direction 1 (English translation of symbols). There are first and second interconnected joints at either end of bag intervals parts B and C, the joints running parallel to each other. In interval B, the number of yarns between joints is 6 in Figures 2 and 4 in each layer. At least some of the weft yarns 1 are crossover yarns switching back and forth from the first layer to the second layer in Figures 2 and 4, with the crossover yarns free of floats at the joints. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Japanese '875 to include between 2 and 4 yarns for each of the first and second layers (instead of 6 as disclosed in Japanese '875) as an obvious matter of design choice, as the specification gives no stated reason or particular purpose for the number of yarns between the joints, and the invention would appear to work with numbers of yarns similar to Japanese '875, so long as there are short intervals of the airbag (claims 10, 13, 18 and 39-41). As broadly recited the crossover yarns are in a plain weave configuration that extends

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across the joints (claims 14 and 16). The joints run in the weft direction 2, and the crossover yarns pass over and under warp yarns in the joints (claims 15 and 37). The layers are free of connection between the first and second joints (claim 22). As broadly and functionally recited, the cushion is woven fabric of "dobby" construction (claim 23). Regarding claim 38, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Japanese '875 so that the joints run in the weft direction, as the specification gives no stated purpose or particular reason for the directions of the joints, and the invention would appear to work just as well if the joints ran in the direction of Japanese '875.

Response to Arguments

3. Applicant's arguments with respect to claims 10, 13-16, 18, 22-23 and 37-41 (35 USC 102) have been considered but are moot in view of the new ground(s) of rejection.

4. Applicant's arguments filed 4/12/07 have been fully considered but they are not persuasive.

The appellant argues that Japanese '875 does not set forth all the elements of the invention, that there is no motivation to change the number of yarns, and that the modification is hindsight construction. However, this is not persuasive because the rejection is now based on 35 USC 103 (the elements or limitations not set forth are obvious), case law has held that changes due to routine experimentation or optimum ranges are obvious (In re Aller, 105 USPQ 233 (CCPA 1955)). While applicant's

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disclosure teaches on page 4, lines 21-22 that the cushion structure retains gas pressure for a prolonged period of time after inflation and state at page 15, lines 15-17 that only about two to four yarns in each layer of fabric will be disposed, applicant's specification also discloses on page 15, lines 9-14 that up to 12 yarns per layer may be used. The statement that 2 to 4 yarns is most preferred without quantitative results to show unexpected superiority is not patentably distinguishing but rather an optimum range as per Aller above. That prior art to Yamashita et al "suggests" a great number of yarns is not persuasive because the prior art relied upon for the rejection (Japanese '875) suggests or shows a smaller number of yarns (6) and applicant's own disclosure above states as many as 12 yarns will work for the invention; hence, applicant's own disclosure suggests increasing the number of yarns. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

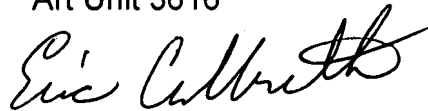
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Culbreth whose telephone number is 571/272-6668. The examiner can normally be reached on Monday-Thursday, 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571/272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric Culbreth
Primary Examiner
Art Unit 3616



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